IN THE CLAIMS

Claims 1-3 (Cancelled).

4. (Previously Amended) A semiconductor device comprising:

a silicon substrate with p-channel and n-channel field effect regions,

wherein said n-channel field effect region has a silicon-germanium buffer layer on said substrate, a silicon-germanium compound relax layer on said buffer layer, and a silicon epitaxial layer formed on said silicon germanium compound relax layer, and

wherein said p-channel field effect region has a silicon-germanium compound layer formed on and in direct contact with said substrate and a silicon epitaxial cap layer formed on said silicon-germanium compound layer.

5. (Previously Added) The semiconductor device of claim 4 wherein, a ratio of germanium to silicon in said buffer layer increase from 0.0 to less than about 0.5 proceeding from said substrate side to said relax layer side of said buffer layer.

6. (Previously Added) The semiconductor device of claim 5 wherein, the ratio of germanium to silicon in said buffer layer is not greater than about 0.3.

7. (Previously Added) The semiconductor device of claim 4 wherein said buffer layer is about 1.68 micrometers thick and said relax layer is about 0.6 micrometers thick.

8. (Previously Added) The semiconductor device of claim 7 wherein said silicon-germanium compound layer in said p-channel field effect region has a thickness of about 100 nanometers.

9. (Previously Added) The semiconductor device of claim 4 wherein said silicon-germanium compound layer has a ratio of germanium to silicon of about 0.1 to less than about 0.8.

10. (Previously Added) The semiconductor device of claim 9 wherein said ratio is about 0.2.

11. (Previously Amended) The semiconductor device of claim 4 wherein said second silicon epitaxial layer has a thickness of 100 nanometers.

12. (Cancelled).

13. (Previously Amended) The semiconductor device of claim 4, wherein in cross section said silicon germanium compound layer and said silicon epitaxial cap layer in said p-channel field effect region occupy substantially the same vertical spacing and position as said silicon epitaxial layer in said n-channel field effect region.

14. (Previously Added) A semiconductor device comprising:

a silicon substrate with p-channel and n-channel field effect regions,

wherein said n-channel field effect region has a silicon-germanium buffer layer on said substrate, a silicon-germanium compound relax layer on said buffer layer, and a silicon epitaxial layer formed on said silicon germanium compound relax layer,

wherein said p-channel field effect region has a silicon-germanium compound layer formed on said substrate and a silicon epitaxial cap layer formed on said silicon-germanium compound layer, and

wherein said n-channel field effect region has drain and source regions formed in said silicon epitaxial layer on said relax layer and not in said relax layer.

15. (Previously Added) The semiconductor device of claim 14 wherein, a ratio of germanium to silicon in said buffer layer increase from 0.0 to less than about 0.5 proceeding from said substrate side to said relax layer side of said buffer layer.

16. (Previously Added) The semiconductor device of claim 14 wherein said silicon-germanium compound layer is in direct contact with a first layer and said silicon-germanium compound relax layer is in direct contact with a second layer, wherein said first and second layers do not comprise the same materials.

Claims 17-20 (Cancelled).